CLAIMS

What is claimed is:

1. A method for supporting wireless communications between a transmitter and receiver, the method comprising the steps of:

allocating both a first and second coded channels in a common direction to support synchronized communications from a transmitter to a receiver;

assigning a time segment in which the transmitter communicates an indication to a target receiver by generating a reference signal over either the first or second coded channels.

2. A method as in claim 1, wherein the reference signal transmitted over the first or second channel includes only pilot information.

3. A method as in claim 1, wherein the transmitter is one of multiple field units and the receiver is a base station.

4. A method as in claim 1, wherein the signal transmitted over the first or second channel does not include forward error correction information.

5. A method as in claim 1, wherein the reference signal transmitted over the first or second channel does not include a data payload.

6. A method as in claim 1, wherein a generation of a reference signal on the first coded channel indicates a request by the transmitter to be assigned traffic channels for transmitting a data payload.

7. A method as in claim 6, wherein a generation of the reference signal by the transmitter on the second coded channel provides a reference signal to the receiver for maintaining synchronization.

8. A method as in claim 1, wherein a generation of the reference signal by a transmitter on the second coded channel provides a timing reference for maintaining synchronization.

9. A method as in claim 1, wherein an assigned time segment for use by a transmitter repeats on a periodic basis so that the transmitter may communicate an indication to the receiver on a periodic basis.

10. A method as in claim 9, wherein each of multiple transmitters is assigned one of multiple periodically repeating and adjacently spaced time segments in which to communicate with a target receiver over the first or second coded channels, each assigned time segment corresponding with a separate communication link between a transmitter and target receiver.

11. A method as in claim 1 further comprising the steps of:

maintaining transmissions on the first and second channels in a time segment by analyzing the reference

signal on the first or second channels at the receiver; and

adjusting timing of the transmitter by sending a message from the receiver to the transmitter indicating whether to advance or retard timing so that subsequently generated reference signals on the first or second channel fall within a corresponding time segment.

12. A method as in claim 11, wherein the message indicating whether to advance or retard timing at the transmitter includes a single bit indicating whether to advance or retard timing.

13. A method as in claim 12, wherein timing is advanced or retarded a predefined time depending on a logic level of the single bit.

14. A method as in claim 13, wherein timing is advanced or retarded based on a second predefined time if the single bit is in a same state for a predetermined number of periods in a row, the second predefined time being greater than the first predefined time.

15. A method as in claim 1, wherein the receiver detects a marker in the first or second channel for maintaining synchronization between a transmitter and the receiver.

16. A method as in claim 1, wherein an initial timing adjustment message is transmitted over a paging channel from the receiver for aligning subsequent

reference signal transmissions by the transmitter within a time segment.

17. A method as in claim 11, wherein the message includes a multi-bit logic string to notify the transmitter of an amount to advance or retard timing so that subsequently generated reference signals on the first or second channel fall within a corresponding time segment.

18. A method as in claim 10, wherein a transmitter is notified in which time segment to transmit based upon at least one message received over a forward link paging channel.

19. A method for supporting wireless communications, the method comprising the steps of:

allocating a coded channel to support synchronized communications from each of multiple transmitters to a receiver;

assigning a first portion of the coded channel for use by a first transmitter to transmit a reference signal to the receiver; and

assigning a second portion of the channel for use by a second transmitter to transmit a message to the receiver.

20. A method as in claim 19, wherein the reference signal transmitted over the coded channel is a timing signal used to synchronize the first transmitter with the receiver.

21. A method as in claim 19, wherein the signal transmitted by the first transmitter does not include forward error correction information.

22. A method as in claim 19, wherein the reference signal transmitted over the first or second channel does not include a data payload.

23. A method as in claim 19, wherein the reference signal is analyzed at the receiver and a feedback message is sent to the transmitter for adjusting its timing.

24. A method as in claim 19, wherein the feedback message indicates to the first transmitter whether to advance or retard its timing.

25. A method as in claim 19, wherein the coded channel is divided into time slots.

26. A method as in claim 19, wherein the second transmitter generates a message including forward error correction information.

27. A method for supporting wireless communications between a transmitter and receiver, the method comprising the steps of:

allocating both a first and second coded channels in a common direction to support synchronized communications from a transmitter to a receiver; and

assigning a time segment in which the transmitter communicates an indication to a target receiver by

generating a signal at an adjusted power level over either the first or second coded channels.

28. A method as in claim 27, wherein a power level of the signal transmitted over the first or second channel is adjusted based on feedback messages.

29. A method as in claim 27, wherein the signal transmitted over the first or second channel includes only pilot information.

30. A method as in claim 27, wherein the signal transmitted over the first or second channel does not include a forward error correction information.

31. A method as in claim 27, wherein the signal transmitted over the first or second channel does not include a data payload.

32. A method as in claim 27, wherein a generation of a signal on the first coded channel indicates a request by the transmitter to be assigned traffic channels for transmitting a data payload.

33. A method as in claim 32, wherein a generation of a signal by the transmitter on the second coded channel provides a signal to the receiver for maintaining a minimal power level to support communications.

34. A method as in claim 27, wherein a generation of a signal by a transmitter on the second coded channel is

measured at the receiver for adjusting subsequent transmissions on the first or second channel.

35. A method as in claim 27, wherein an assigned time segment for use by a transmitter repeats on a periodic basis so that the transmitter may communicate an indication to the receiver on a periodic basis.

36. A method as in claim 35, wherein each of multiple transmitters is assigned one of multiple periodically repeating and adjacently disposed time segments in which to communicate with a target receiver over the first or second coded channels, each assigned time segment corresponding with a separate communication link between a transmitter and target receiver.

37. A method as in claim 27 further comprising the steps of:

maintaining transmissions on the first and second channels in a time segment by analyzing a power level of a transmission on the first or second channels; and

adjusting a power transmission level of the transmitter by sending a message from the receiver to the transmitter indicating whether to increase or decrease its power level so that subsequently generated signals on the first or second channel can be detected at the receiver.

38. A method as in claim 37, wherein the message indicating whether to increase or decrease power level transmissions at the transmitter includes a single bit indicating whether to increase or decrease its power

level of the signal transmitted over the first or second channel.

39. A method as in claim 38, wherein timing is increased or decreased a predefined amount depending on a logic level of the single bit.

40. A method as in claim 39, wherein the power level of the signal is increased or decreased based on a second predefined amount if the single bit is in a same state for a predetermined number of periods in a row, the second predefined amount being greater than the first predefined amount.

41. A method as in claim 27, wherein the receiver detects the signal in the first or second channel for maintaining a power level of transmissions between the transmitter and receiver.

42. A method as in claim 39, wherein the message includes a multi-bit logic string to notify the transmitter of an amount to increase or decrease its power level so that subsequently generated signals on the first or second channel can be detected at the receiver.

43. A method as in claim 38, wherein a transmitter is notified in which time segment to transmit based upon messages received over a forward link paging channel.